SECTION 02315

EXCAVATION FOR LEVEE CONSTRUCTION mm/yy

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 2487

(1993) Classification of Soils for Engineering Purposes (Unified Soil Classification System)

ENGINEERING MANUALS (EM)

EM 385-1-1

(1996) U.S. Army Corps of Engineers Safety and Health Requirements Manual

1.2 [UNIT] PRICE

1.2.1 Excavation

[No separate measurement or payment will be made for Excavation. All costs in connection with excavation will be considered a subsidiary obligation of the Contractor.]

1.2.1.1 Payment

Payment will be made for Excavation at the contract unit price which includes full compensation for all equipment, labor, materials, and incidentals necessary to complete the work specified. No separate payment will be made for stockpiling.

1.2.1.2 Measurement

Excavation will be measured for payment by use of the average end area method. The basis of measurement will be a survey of the area prior to the excavation [and clearing and grubbing] and a second survey of the same area after the completion of the excavation. For areas where lines and grades are shown on the drawings, measurement will be limited to those lines and grades. Slides caused by fault of the Contractor, over excavation, and excavation performed for the convenience of the Contractor shall not be measured for payment.

1.2.1.3 Unit of Measure

Unit of measure: cubic meter cubic yard.

1.3 SYSTEM DESCRIPTION

The work covered by this section consists of furnishing all equipment, labor, materials, and incidentals, and performing all operations necessary for excavation of borrow areas [and existing levees], and for all other excavations incidental to the construction of levees, [channels,] [ditches] [structures] [and ponding areas] as specified and shown.

1.4 DEFINITIONS

1.4.1 Satisfactory Materials

Satisfactory material shall consist of material as defined in the Section 02331 EMBANKMENT FOR LEVEE CONSTRUCTION paragraph DEFINITIONS, subparagraph SATISFACTORY MATERIALS.

1.4.2 Unsatisfactory Materials

Unsatisfactory materials shall be as defined in Section 02331 EMBANKMENT FOR LEVEE CONSTRUCTION, paragraph DEFINITIONS, subparagraph UNSATISFACTORY MATERIALS.

1.5 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-08 Statements

Shoring, Sheeting, and Bracing; GA

Submit a detailed shoring, sheeting and bracing plan [____] days prior to the beginning of any excavation so supported. The plan for shoring, sheeting and bracing shall be prepared and certified by licensed professional engineer. The plan shall include drawings and design computations of the proposed shoring, sheeting, and bracing, and documentation, showing details of the coordination and approval of shoring, sheeting, and bracing by the applicable parties. Approval of the detailed plan shall be obtained from the Contracting Officer prior to starting the work. The plan shall be modified as required to meet field conditions, and the modifications shall be approved prior to use.

Excavation; GA

Submit a written excavation plan [____] days prior to the beginning of any excavation. Approval of the detailed plan shall be obtained from the Contracting Officer prior to starting the work. If necessary, the plan shall be modified as required to meet field conditions, and the modifications shall be approved prior to use. As a minimum, the plan shall contain, the following:

a. Proposed methods for preventing interference with, or damage to,

existing underground or overhead utility lines, trees designated to remain and other man-made facilities or natural features designated to remain within or adjacent to the construction rights-of-way.

- b. Provision for coordinating the work with other Contractors working in the construction rights-of-way or on facilities crossing or adjacent to this work.
- c. The proposed methods for controlling surface and ground water in the borrow areas and required excavations.
- d. Stockpiling plan for embankment material before it is transported to the project site showing locations, stockpile heights, slopes, limits, and drainage around the stockpile areas.
- e. A complete listing of equipment used for excavation and to transport the excavated material.
- f. The Contractor's proposed sequence of work for excavating the borrow areas with plan and cross sectional views showing starting and final work locations and clearing, grubbing and stripping limits.
- g. The Contractor's proposals for conserving arable land and for making optimum use of available borrow, including the Contractor's proposed methods for grading the bottom of the borrow areas after completing use of the borrow areas.

Borrow Areas; GA

Submit a written statement to the Government not later than [____] days after receipt of Notice to Proceed indicating the Contractor's intention to use the specified Government-furnished borrow area(s), Contractor-furnished borrow area(s), dredged borrow areas, or a combination of these borrow areas.

SD-09 Reports

Survey Records; GA

Submit a copy of the records of each compliance survey the next work day following the survey.

SD-18 Records

Contractor-Furnished Rights-of-way for Drainage; FIO

If private property is to be used for drainage, submit written evidence that the right has been obtained from the property owner for drainage on his property. Written evidence shall consist of an authenticated copy of the [conveyance] [easement] under which the Contractor acquired the property rights and access thereto, prepared and executed in accordance with applicable State and local requirements.

1.6 PERMITS

In accordance with the Contract Clause PERMITS AND RESPONSIBILITIES, the
Contractor shall obtain all necessary permits required for disposal,
hauling, erosion control, [], and pay all fees associated with
permitting and compliance.[In addition, the Government has obtained
permits for storm water discharge [and []], as specified in Section
[] ENVIRONMENTAL PROTECTION.] The Contractor shall comply with the
terms of these permits and with the requirements of Section []
ENVIRONMENTAL PROTECTION and this section.

PART 2 PRODUCTS

2.1 PARTS

Part titles are the three part titles (GENERAL, PRODUCTS, and EXECUTION) established by CSI. All three parts must be included in sections in Divisions 2 through 16. Part titles in sections in Divisions 00 and 01 may be omitted if not necessary for the subject matter being presented. Divisions 00 and 01 sections without part titles must still contain the part 1 PART TAGS at the appropriate location, and all paragraphs in the section must be numbered with the prefix 1 (1.1, 1.2, etc.).

2.2 PARAGRAPHS

This is a first tier or main paragraph. Numbered paragraph levels are as follows:

- 1.1 Main Paragraphs (First Tier Paragraphs)
- 1.1.1 Subparagraphs (Second Tier Paragraphs)
- 1.1.1.1 Subparagraphs (Third Tier Paragraphs)

Subdivisions below the third tier should be avoided, but when necessary they should carry alpha designations (a, b, etc.). Subdivisions below the third tier will not appear on the table of contents generated through SPECSINTACT.

2.3 MAIN PARAGRAPH TITLES

All numbered paragraphs and subparagraphs must have titles which are entered three spaces after the number. Titles for paragraphs with alpha designations are optional, but must be consistent within any main paragraph.

PART 3 EXECUTION

3.1 SEQUENCE OF MAIN PARAGRAPHS

Sequence of main paragraphs should follow the sequence provided in the document GUIDANCE FOR THE PREPARATION OF CORPS OF ENGINEERS GUIDE SPECIFICATIONS (CEGS) to the extent those titles are appropriate for the subject matter involved. When the titles provided are not appropriate, care should still be taken to maintain the same subject matter sequence as provided in the guidance document.

3.2 DATE OF TEMPLATE

The date of this template is 8 June 1998. This template will be updated from time-to-time to reflect current requirements.

-- End of Section --